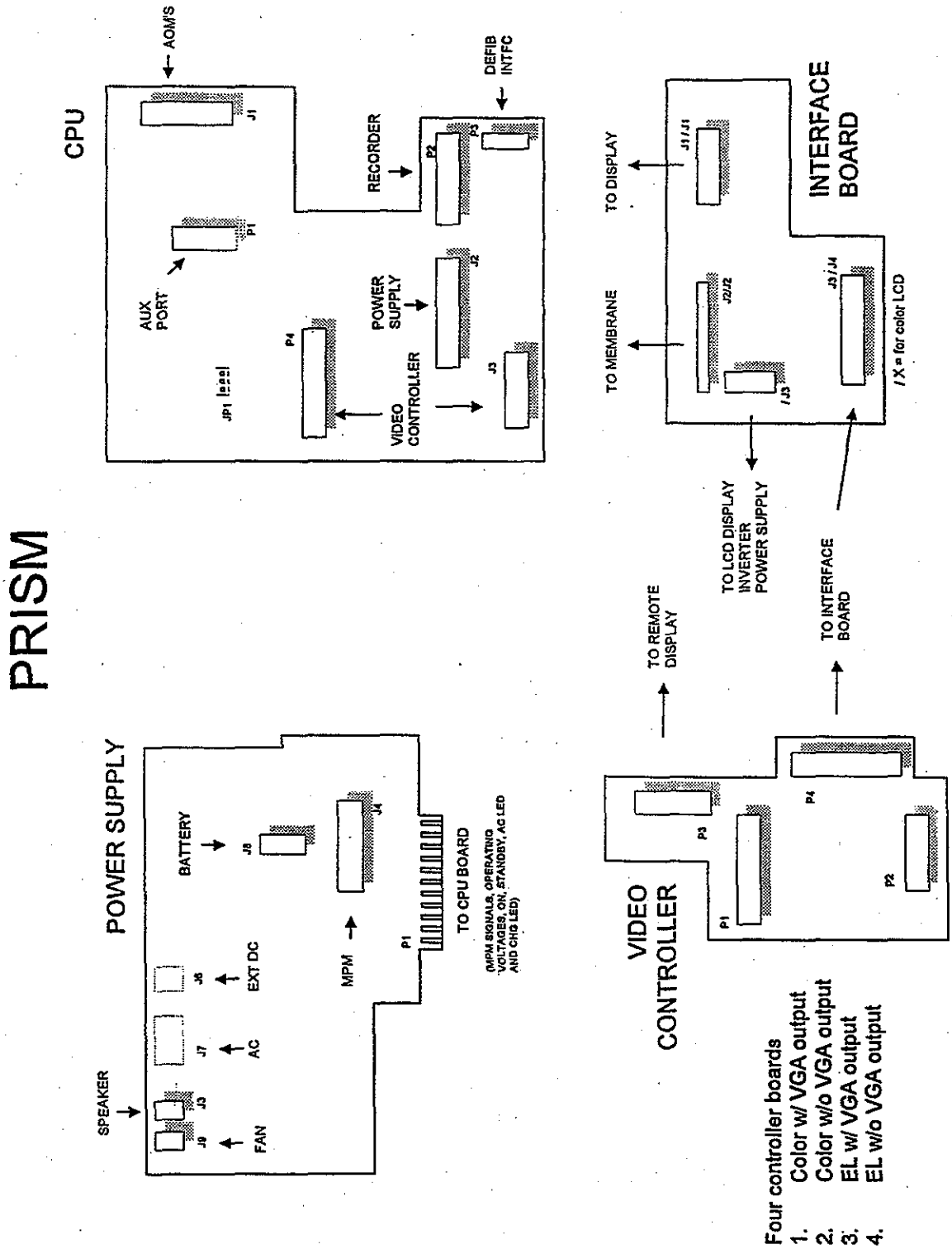
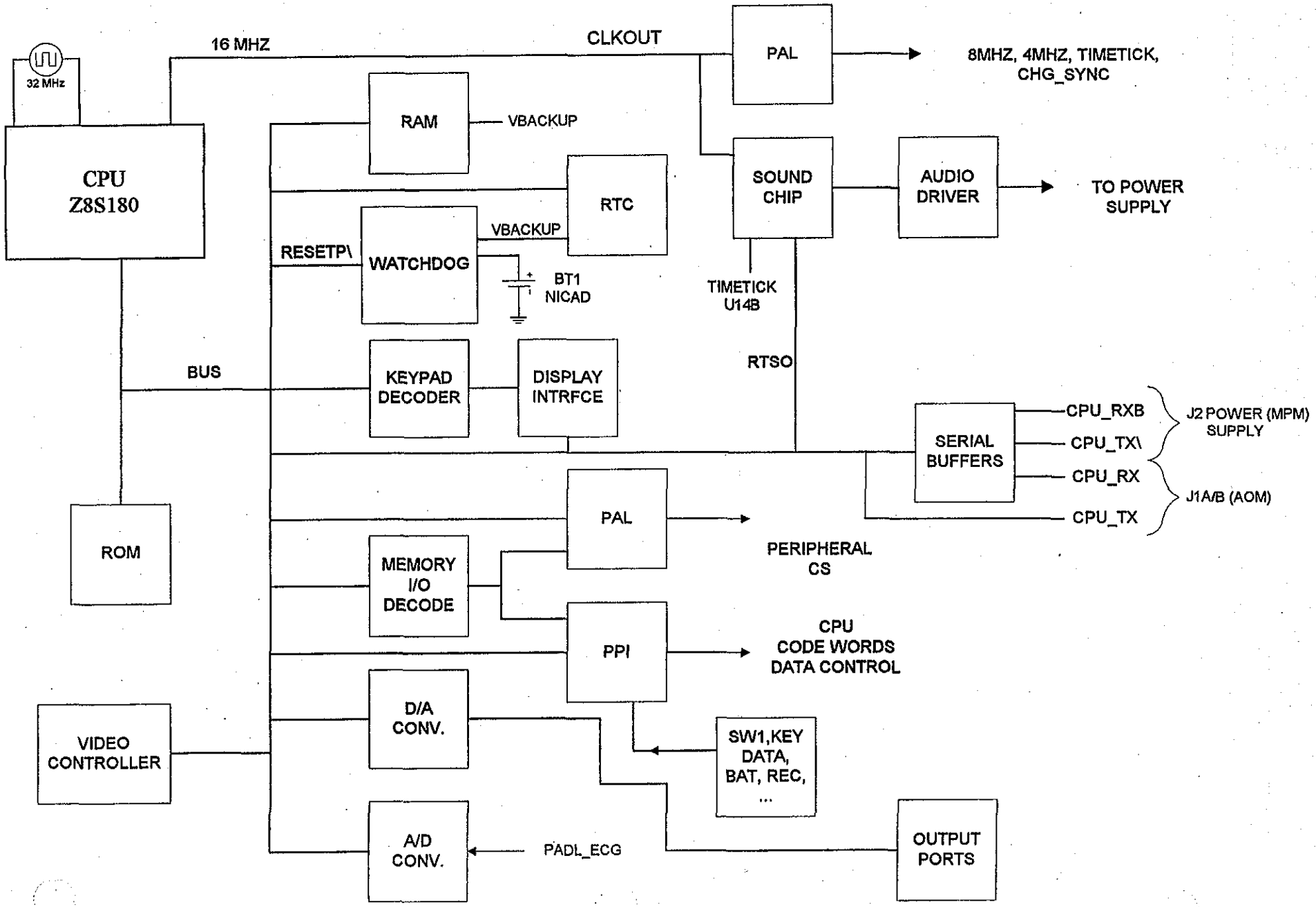
Chapter 2:
Prism Assemblies

2

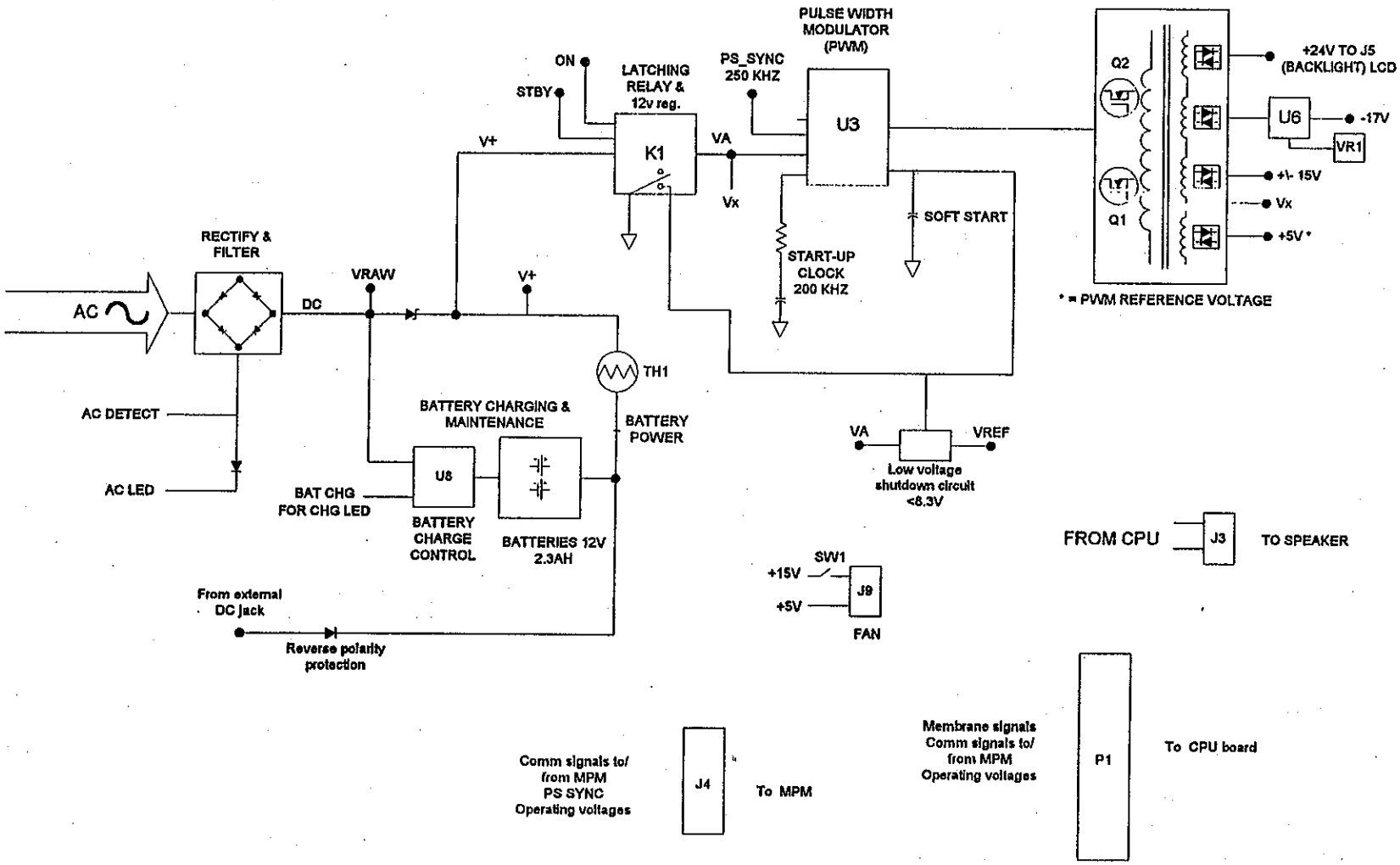
PRISM ASSEMBLIES OVERVIEW



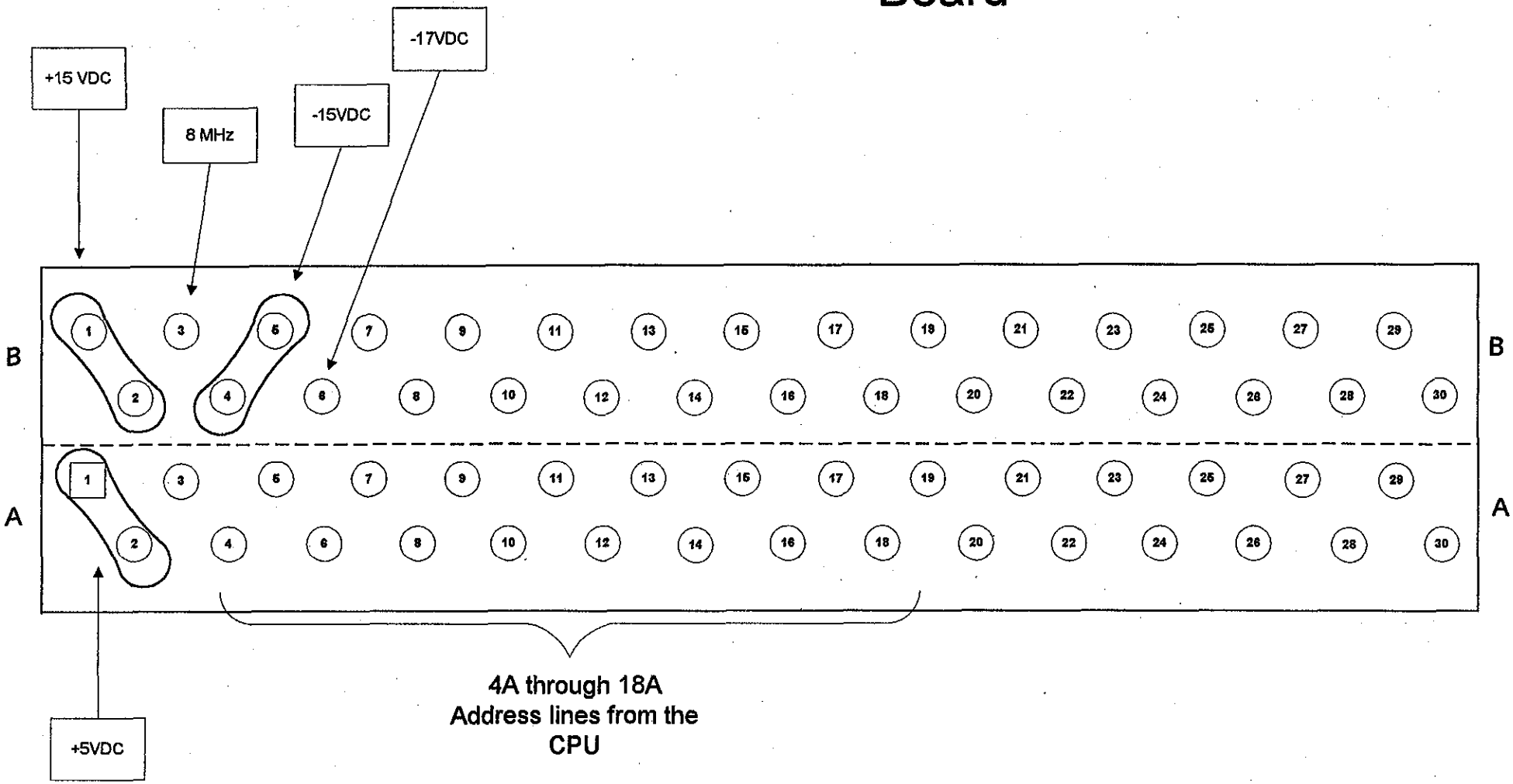
PRISM CPU


32 MHz
16 MHZ
CLKOUT
PAL
8MHZ, 4MHZ, TIMETICK, CHG_SYNC
RAM
VBACKUP
CPU Z8S180
SOUND CHIP
AUDIO DRIVER
TO POWER SUPPLY
RTC
VBACKUP
RESETP\
WATCHDOG
BT1 NICAD
TIMETICK U14B
RTSO
BUS
KEYPAD DECODER
DISPLAY INTRFCE
SERIAL BUFFERS
CPU_RXB
CPU_TX\
CPU_RX
CPU_TX
J2 POWER (MPM) SUPPLY
J1A/B (AOM)
ROM
PAL
PERIPHERAL CS
MEMORY I/O DECODE
PPI
CPU CODE WORDS DATA CONTROL
VIDEO CONTROLLER
D/A CONV.
SW1,KEY DATA, BAT, REC, ...
A/D CONV.
PADL_ECG
OUTPUT PORTS

POWER SUPPLY
PRISM



Power Test Points
P1 on Video Controller Board



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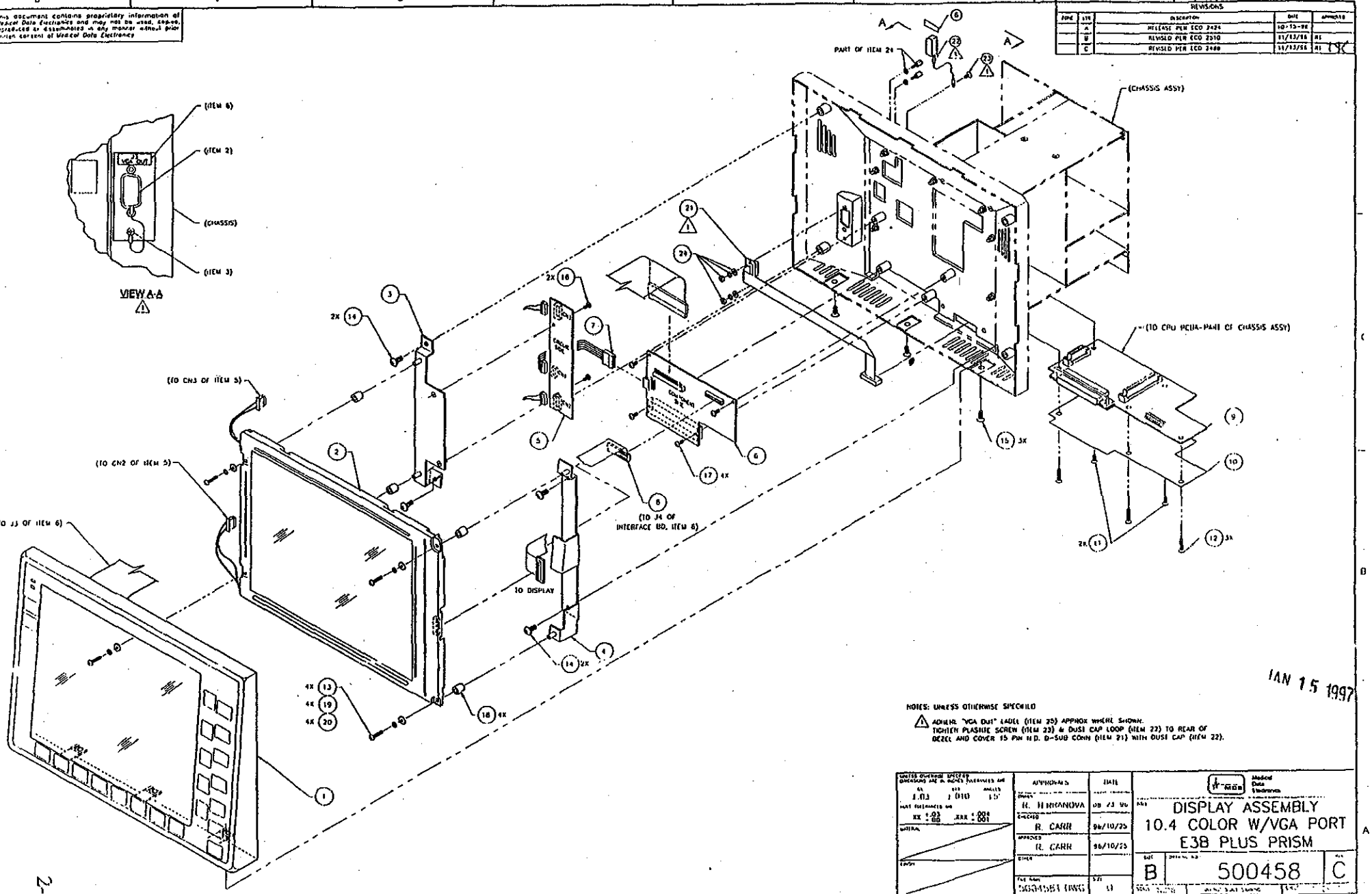
DWG NO	500458	REV	C

REVISIONS

ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	RELEASE PER ECO 2424	10-15-96	
	B	REVISED PER ECO 2510	11/13/96	RI
	C	REVISED PER ECO 2680	11/13/96	RI



NOTES: UNLESS OTHERWISE SPECIFIED

⚠ ADHERE "VGA Out" LABEL (ITEM 25) APPROX WHERE SHOWN.
TIGHTEN PLASTITE SCREW (ITEM 23) & DUSI CAP LOOP (ITEM 22) TO REAR OF BEZEL AND COVER 15 PIN H.D. D-SUB CONN (ITEM 21) WITH DUSI CAP (ITEM 22).

APPROVALS	DATE
DRAWN R. HERNANDEZ	08/23/96
CHECKED R. CARR	96/10/25
APPROVED R. CARR	96/10/25
OTHER	

Medical Data Electronics

DISPLAY ASSEMBLY
10.4 COLOR W/VGA PORT
E3B PLUS PRISM

SIZE	DRAWING NO	REV
B	500458	C

500458 DISPL ASSY,10.4 COLOR W/VGA PORT,PRISM REV.C(E2488

MDE Part Number	Description	Quantity	Reference
350100-0011A	CBL ASSY, FLAT,HIROSE CONN 8 IN LG	1	8
358100-0010A	SCR, 4-40 X 1/2,PH PNHD ZINC	4	13 - DO NOT ISSUE
358100-0013A	SCR, 4-40 X 3/8,PH PNHD,ZINC	2	16 - DO NOT ISSUE
358100-0016A	SCR,6-32 X 3/8,PH FLTHD,100 DEGREE STAINLESS STEEL	3	15 - DO NOT ISSUE
358100-0021A	SCR, 4-40 X 1/4,PH FLTHD,100 DEG,ZN	2	11 - DO NOT ISSUE
358100-0036A	SCR, 4-40 X 1/4,PH PNHD,ZINC OR ANY	4	17 - DO NOT ISSUE
358100-0071A	SCR, 4-40 x 7/8 IN LG PHFLTHD 82DEG SS (OR ZN PLT)	3	12 - DO NOT ISSUE
358100-0100A	SCR, 8-32 X 3/8 PH PNHD ZINC OR ANY PLATE	4	14 - DO NOT ISSUE
358100-0163A	SCR, #4 x 3/16LG,PLASTITE,PHL PANHD STL ZN	1	23 - DO NOT ISSUE
358200-0004A	WSHR, #4 FLAT STL ZINC,(.125ID,9/32OD,.025THK)	4	19 - DO NOT ISSUE
358200-0009A	WSHR, #4 SPLIT LOCK	4	20 - DO NOT ISSUE
360500-0007A	HARDWARE, SCREWLOCK KIT	1	24
360500-0182A	SPCR, .166 ID x 5/16~ OD x 5/16~ LG, AL	4	18
362000-0052A	DISPLAY, LCD,COLOR TFT,10.4 INCH DIAG	1	2
382000-0058A	INVERTER POWER SUPPLY FOR CCFT 10.4 IN TFT LCD	1	5
384000-0256A	DUST CAP, D-SUB,SHELL SIZE DE,WITH STRING	1	22
402912-0000	PCBA, 10.4 COLOR INTERFACE, E3B PLUS REV. C(E2549)	1	6
402917-0000	FISH PAPER E3B PLUS LCD VIDEO CONTRLLR REV.A(E2277	1	10
402919-0000	CBL ASSY,INVRTR-I/F,E3B+ PRSM 10.4 VGA REV.A(E2424	1	7
402920-0000	CBL ASSY,10.4 VGA PORT TO VID CNTRLR REV. A(E2424)	1	21
402929-0000	BRKT,MNT,DISP,LT,E3B+PRSM,10.4COLR VGA REV.A(E2424	1	3
402930-0000	BRKT,MNT,DISP,RT,E3B+PRSM,10.4COLR VGA REV.A(E2424	1	4
402931-0000	DISPL SUBASSY,E3B+PRISM,10.4 COLOR VGA REV.A(E2424	1	1
403017-0000	PCBA, COLOR VIDEO CNTRLLR(W/ VGA PORT)REV.D(E2552)	1	9
403156-0000	LBL, VGA OUT REV. A(E2488)	1	25

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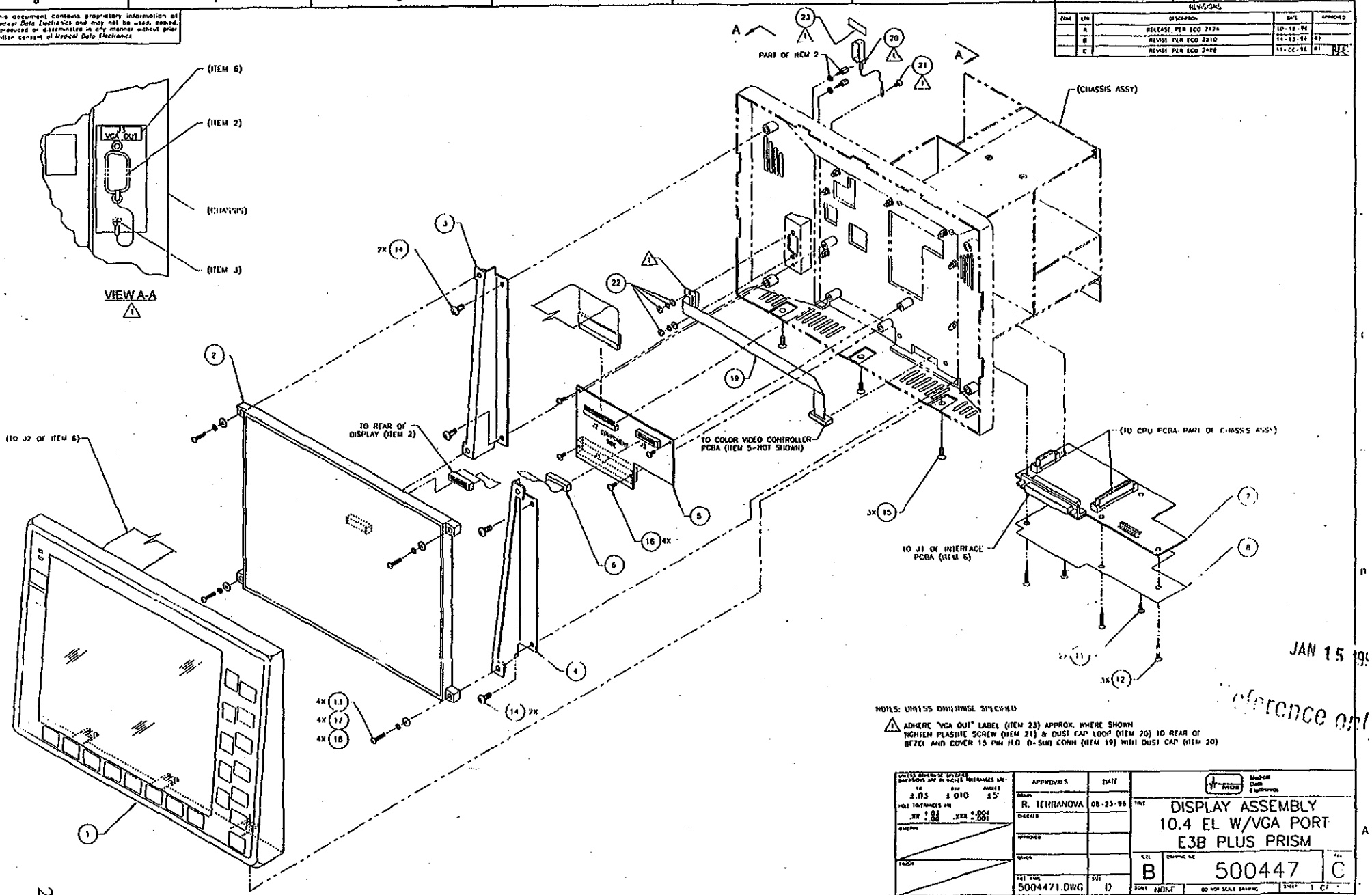
DWG NO	500447	REV	C

REVISIONS

ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	RELEASE PER ECO 2474	10-18-96	
	B	REVISE PER ECO 2510	11-13-96	RT
	C	REVISE PER ECO 2692	11-22-96	RT

VIEW A-A


(CHASSIS ASSY)
PART OF ITEM 2
(TO J2 OF ITEM 6)
TO REAR OF DISPLAY (ITEM 2)
TO COLOR VIDEO CONTROLLER PCBA (ITEM 5-NOT SHOWN)
(TO CPU PCBA PART OF CHASSIS ASSY)
TO J1 OF INTERFACE PCBA (ITEM 6)

NOTES: UNLESS OTHERWISE SPECIFIED

⚠ ADHERE "VGA OUT" LABEL (ITEM 23) APPROX. WHERE SHOWN
TIGHTEN PLASTITE SCREW (ITEM 21) & DUST CAP LOOP (ITEM 20) TO REAR OF BEZEL AND COVER 15 PIN H.D. D-SUB CONN (ITEM 19) WITH DUST CAP (ITEM 20)

APPROVALS	DATE
DRAWN R. TERRANOVA	08-23-96
CHECKED	
APPROVED	
QA/CA	
PRT NAME 5004471.DWG	SH 0

DISPLAY ASSEMBLY
10.4 EL W/VGA PORT
E3B PLUS PRISM

SIZE B | DRAWING NO 500447 | REV C

SCALE NONE | DO NOT SCALE DRAWING | SHEET 1 OF 1

JAN 15 19

Reference on

500447 DISPL ASSY,10.4 EL W/VGA PORT,PRISM REV. C(E2488)

MDE Part Number	Description	Quantity	Reference
358100-0010A	SCR, 4-40 X 1/2,PH PNHD ZINC	4	13 - DO NOT ISSUE
358100-0016A	SCR,6-32 X 3/8,PH FLTHD,100 DEGREE STAINLESS STEEL	3	15 - DO NOT ISSUE
358100-0021A	SCR, 4-40 X 1/4,PH FLTHD,100 DEG,ZN	2	11 - DO NOT ISSUE
358100-0036A	SCR, 4-40 X 1/4,PH PNHD,ZINC OR ANY	4	16 - DO NOT ISSUE
358100-0071A	SCR, 4-40 x 7/8 IN LG PHFLTHD 82DEG SS (OR ZN PLT)	3	12 - DO NOT ISSUE
358100-0100A	SCR, 8-32 X 3/8 PH PNHD ZINC OR ANY PLATE	4	14 - DO NOT ISSUE
358100-0163A	SCR, #4 x 3/16LG,PLASTITE,PHL PANHD STL ZN	1	21 - DO NOT ISSUE
358200-0004A	WSHR, #4 FLAT STL ZINC,(.125ID,9/32OD,.025THK)	4	17 - DO NOT ISSUE
358200-0009A	WSHR, #4 SPLIT LOCK	4	18 - DO NOT ISSUE
360500-0007A	HARDWARE, SCREWLOCK KIT	1	22
362000-0051A	DISPLAY, EL,640x480,10.4 INCH DIAG	1	2
384000-0256A	DUST CAP, D-SUB,SHELL SIZE DE,WITH STRING	1	20
402917-0000	FISH PAPER E3B PLUS LCD VIDEO CONTRLLR REV.A(E2277	1	8
402920-0000	CBL ASSY,10.4 VGA PORT TO VID CNTRLR REV. A(E2424)	1	19
402921-0000	CBL ASSY,EL DISP TO I/F PCBA,E3B+ PRSM REV.A(E2424	1	6
402925-0000	PCBA, EL VGA INTERFACE,E3B+ PRISM REV. B(E2534)	1	5
402927-0000	BRKT, MNT,DISP,RT,E3B+ PRSM,10.4EL VGA REV.A(E2424	1	4
402928-0000	BRKT, MNT,DISP,LT,E3B+ PRSM,10.4EL VGA REV.A(E2424	1	3
402932-0000	DISPL SUBASSY,E3B+ PRISM,10.4 EL VGA REV.A(E2424)	1	1
403140-0000	PCBA, PRSM VGA EL CNTRLLR W/EXT CRT OUT REV.B(2510	1	7
403156-0000	LBL, VGA OUT REV. A(E2488)	1	23

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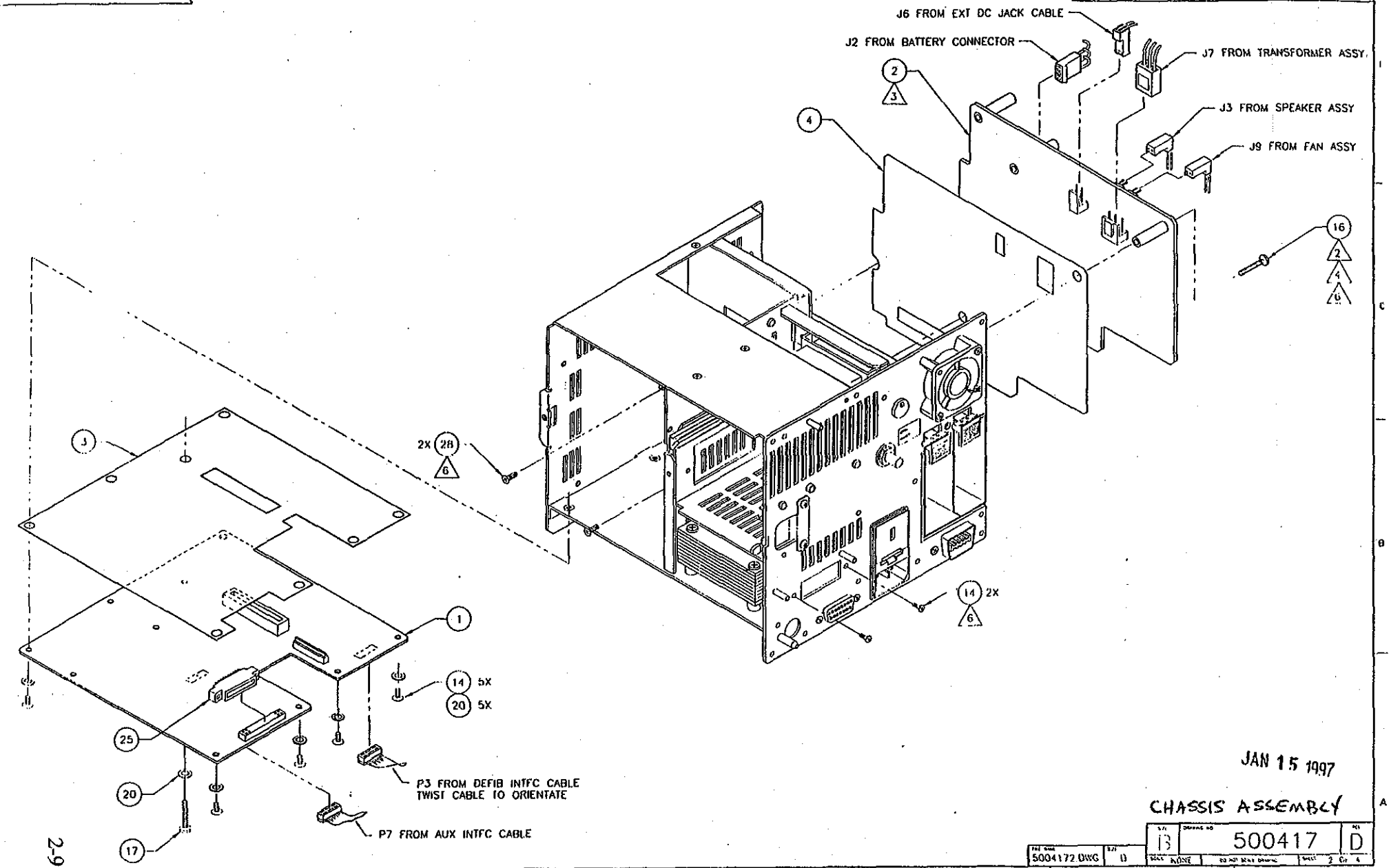
500417	2	D

REVISIONS

ZONE	LTR	DESCRIPTION	DATE	APPROVED
		SEE SHEET 1		



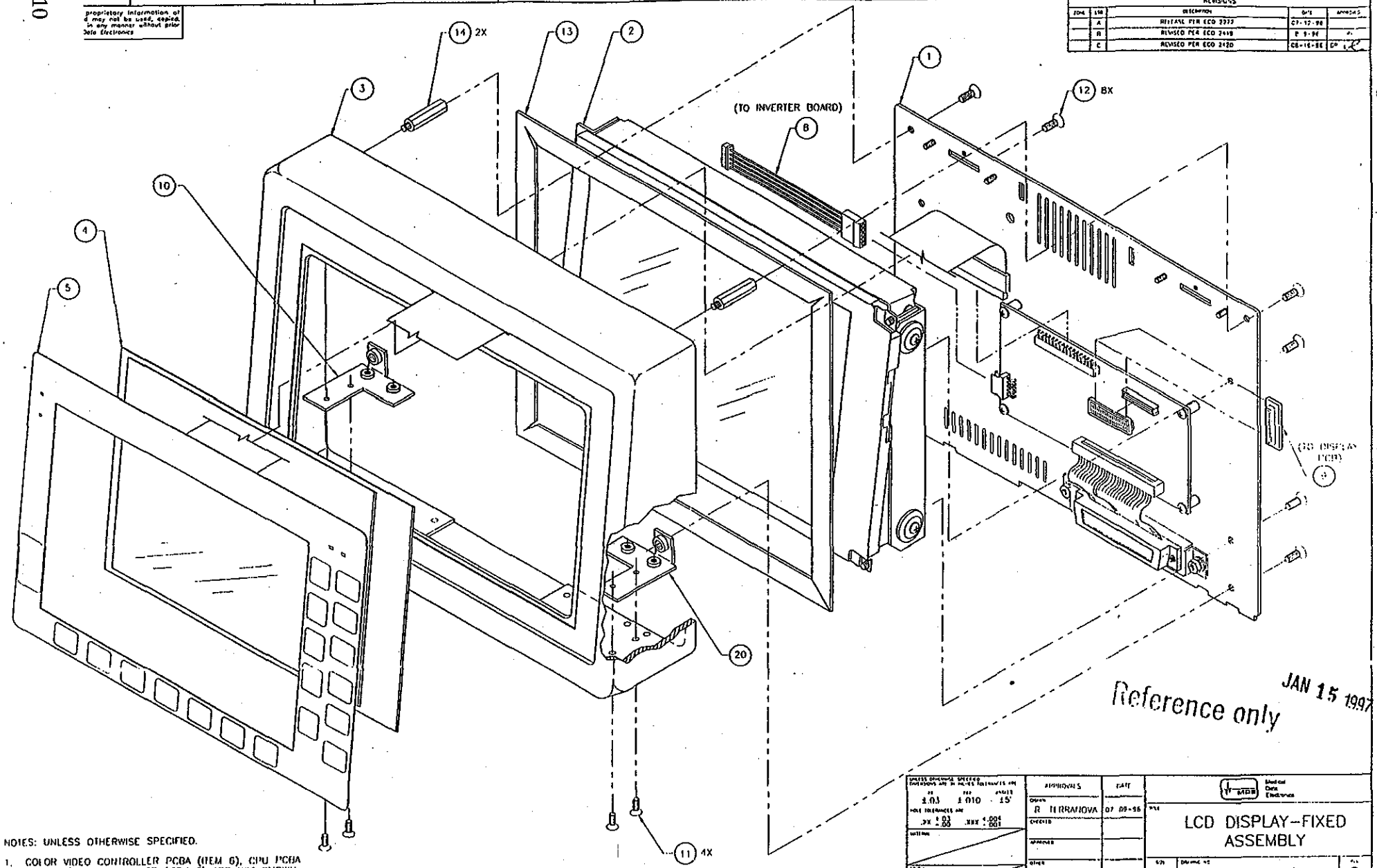
JAN 15 1997

CHASSIS ASSEMBLY

5004172.DWG	D

SIZE	DRAWING NO	REV
B	500417	D

SCALE	DO NOT SCALE DRAWING	SHEET
NONE		2 OF 4



NOTES: UNLESS OTHERWISE SPECIFIED.

1. COLOR VIDEO CONTROLLER PCBA (ITEM 6), CPU PCBA (ITEM 15) AND FISHPAPER (ITEM 7) ARE NOT SHOWN.

REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	RELEASE PER ECO 2277	07-12-95	
	B	REVISED PER ECO 2448	8-9-96	
	C	REVISED PER ECO 2420	08-16-96	

APPROVERS		DATE	
DRAWN	R TERRAFIOVA	07 08-96	
CHECKED			
APPROVED			
OTHER			
FILE NAME	5004291.DWG	SIZE D	

Medical Data Electronics

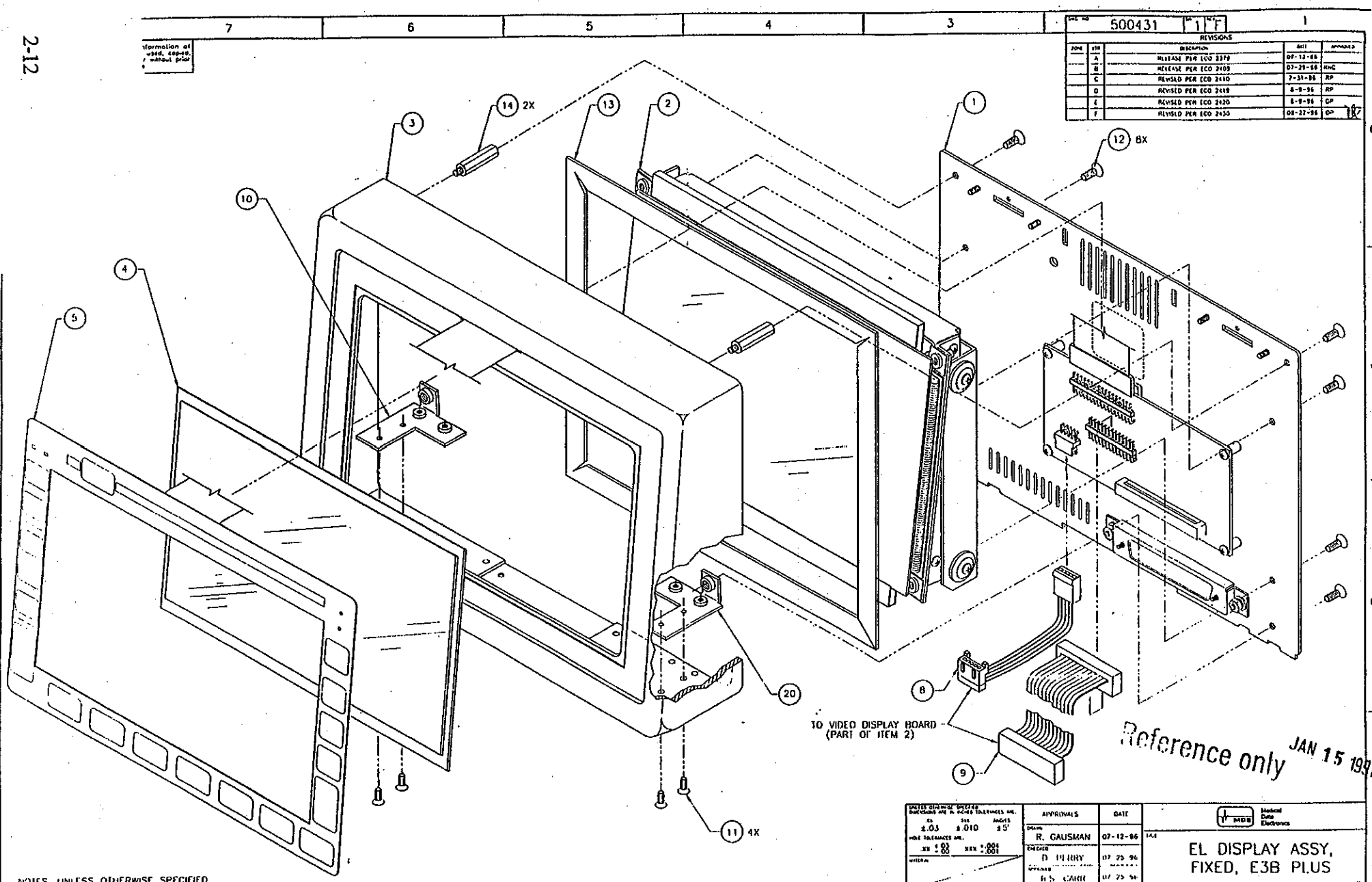
TITLE: LCD DISPLAY-FIXED ASSEMBLY

SIZE B | DRAWING NO. 500429 | REV C

SCALE NONE | DO NOT SCALE DRAWING | SHEET 1 OF 3

500429 LCD PRISM DISPL ASSY-E3B PLUS FIXED REV. C(E2420)

MDE Part Number	Description	Quantity	Reference
350100-0011A	CBL ASSY, FLAT,HIROSE CONN 8 IN LG	1	9
358100-0021A	SCR, 4-40 X 1/4,PH FLTHD,100 DEG,ZN	2	19 - DO NOT ISSUE
358100-0071A	SCR, 4-40 x 7/8 IN LG PHFLTHD 82DEG SS (OR ZN PLT)	3	20 - DO NOT ISSUE
358100-0090A	SCR, 4-40 x 5/16 PH PNHD PLATED	4	17 - DO NOT ISSUE
358100-0135A	SCR, TAPTITE,4 x5/16~LG,100DEG,FLH PHL STL Zn PLT	4	11 - DO NOT ISSUE
358200-0007A	WSHR, #4 INT TOOTH	4	18 - DO NOT ISSUE
360500-0171A	STNDOFF, 6-32,7/8~LG,1/4 HEX,M/F	2	14
384000-0262A	EMI FOAM GASKET	30	13 - DO NOT ISSUE
401143-0000	FAB.,PAINT SCR(FM 358100-62A)E4/E3B+ REV B (E1748)	8	12
402790-0000	WINDOW, DISPLAY,COLOR TFT LCD,E3B PLUS REV.A(E2277	1	4
402796-0000	MEMBRANE SWITCH,COLOR TFT LCD,E3B PLUS REV.B(E2426	1	5
402804-0000	BEZEL, FRONT,MOLDED,E3B PLUS REV. A(E2205)	1	3
402811-0000	DISPL ASSY,8.4~ E3B PLUS,LCD,COLOR TFT REV.A(E2277	1	2
402855-0000	CABLE ASSY, FLAT,37-COND,E3B PLUS REV. C(E2422)	1	16
402901-0000	CBL ASSY, INVERTER TO I/F BD	1	8
402914-0000	PCBA, COLOR VIDEO CONTROLLER, E3B PLUS REV.C(E2552	1	6
402917-0000	FISH PAPER E3B PLUS LCD VIDEO CONTRLLR REV.A(E2277	1	7
403005-0000	REAR PANEL DISPLAY-E3B PLUS FIXED REV. B(E2432)	1	1
403023-0000	PCBA, CPU VGA COMPATABLE REV. A1(D684)	1	15
403041-0000	BRACKET, DISPLAY PANEL MOUNTING,LEFT REV. A(E2420)	1	10
403042-0000	BRACKET, DISPLAY PANEL MOUNTING,RIGHT REV. A(E2420	1	20



REVISIONS				
ZONE	LTR	DESCRIPTION	DATE	APPROVED
	A	RELEASE PER ECO 2370	07-13-95	
	B	RELEASE PER ECO 2403	07-29-95	KHC
	C	REVISED PER ECO 2410	7-31-95	RP
	D	REVISED PER ECO 2419	8-9-95	RP
	E	REVISED PER ECO 2420	8-9-95	GP
	F	REVISED PER ECO 2450	08-27-96	GP

NOTES UNLESS OTHERWISE SPECIFIED.

1. APPLY LOCTITE 271 TO THREADS OF SCREWS.

APPROVALS	DATE
DRAWN R. GAUSMAN	07-12-96
CHECKED D. PERRY	07-29-96
APPROVED K.S. CAREY	07-29-96
OTHER	
FILE NAME 500431.DWG	SIZE D

Medical Data Electronics

EL DISPLAY ASSY, FIXED, E3B PLUS

SIZE B | DRAWING NO. 500431 | REV F

SCALE: NONE | 20 MM SCALE DRAWING | SHEET 1 OF 1

Reference only JAN 15 1997

500431 E3B PLUS FIXED DISPLAY ASSY REV. F(E2430)

MDE Part Number	Description	Quantity	Reference
358100-0021A	SCR, 4-40 X 1/4,PH FLTHD,100 DEG,ZN	2	15 - DO NOT ISSUE
358100-0071A	SCR, 4-40 x 7/8 IN LG PHFLTHD 82DEG SS (OR ZN PLT)	2	16 - DO NOT ISSUE
358100-0090A	SCR, 4-40 x 5/16 PH PNHD PLATED	4	18 - DO NOT ISSUE
358100-0135A	SCR, TAPTITE,4 x5/16~LG,100DEG,FLH PHL STL Zn PLT	4	11 - DO NOT ISSUE
358200-0007A	WSHR, #4 INT TOOTH	4	19 - DO NOT ISSUE
360500-0171A	STNDOFF, 6-32,7/8~LG,1/4 HEX,M/F	2	14
384000-0262A	EMI FOAM GASKET	30	13 - DO NOT ISSUE
401143-0000	FAB.,PAINT SCR(FM 358100-62A)E4/E3B+ REV B (E1748)	8	12 - DO NOT ISSUE
401949-0000	FISH PAPER VIDEO CONTROLLER PCBA REV. C(E2350)	1	7
402761-0000	PCBA, EL VIDEO CONTROLLER E3B PLUS REV. D(E2545)	1	6
402794-0000	WINDOW, DISPLAY,640x400 EL,E3B PLUS REV. A(E2205)	1	4
402800-0000	MEMBRANE SWITCH, 640x400 EL,E3B PLUS REV. C(E2333)	1	5
402804-0000	BEZEL, FRONT,MOLDED,E3B PLUS REV. A(E2205)	1	3
402808-0000	REAR PANEL DISPLAY ASSY E3B PLUS REV. C(E2432)	1	1 - DO NOT ISSUE
402812-0000	DISPLAY ASSY, E3B PLUS,EL,640x400 REV. B(E2276)	1	2 - DO NOT ISSUE
402853-0000	5-POS DISP INTRFC PCB CBL ASSY E3B+ REV. B(E2430)	1	8
402854-0000	26-POS DISP INTRFC PCB CBL ASSY E3B+ REV. B(E2430)	1	9
402855-0000	CABLE ASSY, FLAT,37-COND,E3B PLUS REV. C(E2422)	1	17
403029-0000	MEMBRANE SWITCH 640x400 EL E3B PLUS REV. B(E2457)	1	5
403041-0000	BRACKET, DISPLAY PANEL MOUNTING,LEFT REV. A(E2420)	1	10
403042-0000	BRACKET, DISPLAY PANEL MOUNTING,RIGHT REV. A(E2420	1	20